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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,526	06/25/2003	James P. Reilly	32993-72727	4086

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EXAMINER

LEYBOURNE, JAMES J

ART UNIT PAPER NUMBER

2881

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,526

Applicant(s)

REILLY ET AL.

Examiner

James J. Leybourne

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-12, 14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/05</u> | 6) <input type="checkbox"/> Other: _____ |

Application/Control Number:
10/603,526
Art Unit: 2881

Page 2

DETAILED ACTION

1. According to the "Amendment" received March 9, 2005, claims 1, 5 and 13 have been amended.
2. According to the "Preliminary Amendment" received April 28, 2005, the specification has been amended.

Response to Arguments

3. Applicants arguments made with respect to claims 1-4, 6-12 and 14-19 have been considered but are not persuasive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krutchinsky et al. (US 20020148972).

In Fig. 2, Krutchinsky et al. disclose a MALDI pulsed ionizer **12** includes a laser **20** configured to pulse a sample located on a substrate **22**. The laser **20** is focused on the sample through a lens **24** and a mirror **26** directs the collimated laser beam through a window **25** towards the surface of the substrate **22**. The mirror **26** is preferably configured to be "wobbled" in order to scan the sample with the laser beam [0028].

Krutchinsky et al. do not state that a processing unit is used to operate the laser source and control the steering of the laser beam over the sample. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Krutchinsky et al. since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Yenner*, 120 USPQ 192.

6. Claims 2, 3, 6, 8, 10, 11, 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krutchinsky et al. as applied to claims 1 and 9 above, in view of Hughey et al. (USPN 6707035). Regarding claims 6, 8, 14 and 16, in Fig. 5, Krutchinsky et al. teach placing samples to be analyzed on a sample stage arranged in a predetermined geometric pattern. However, they are silent regarding use of a mirror array comprising separate mirrors for X and Y motion of the beam.

In Fig 1a, Hughey et al. disclose a laser beam **1100** directed through a window **1102** in a sealed chamber containing a catalyst plate **1104**. They teach that the catalyst plate **1104** can be stationary and provisions can be included for scanning the laser

beam 1100 in either one or two dimensions using one or more moving mirrors (column 14, lines 50-54). It would be obvious to one of ordinary skill in the art that the X and Y scanning mirrors of Hughey et al. could be used to provide the scanning capability in the pulsed ionizer of Krutchinsky et al. and this would be desirable because Krutchinsky et al. teach the mirror 26 is preferably configured to be "wobbled" in order to scan the sample with the laser beam [0028].

Allowable Subject Matter

7. Claims 5 and 13 are allowed.

8. The following is an examiner's statement of reasons for allowance:

With respect to claims 5, and 13, the prior art fails to teach or fairly suggest a method or apparatus for scanning a MALDI source support using a logarithmic spiral pattern.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Claims 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number:
10/603,526
Art Unit: 2881

Page 5

11. The following is a statement of reasons for the indication of allowable subject matter.

With respect to claims 7 and 15, the prior art fails to teach or fairly suggest a method or apparatus for scanning a MALDI source support using a Logarithmic spiral pattern.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Leybourne whose telephone number is 571 262-2478. The examiner can normally be reached on M_F 10:00AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number:
10/603,526
Art Unit: 2881

Page 6

September 14, 2005

JJL


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800